UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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REGIONAL
ADMINISTRATOR'S
DIVISION

June 16, 2023

Shane Walker
Fish and Wildlife Service
Alaska Region, National Wildlife Refuge System
95 Sterling Highway, Suite 1
Homer, Alaska 99603

Dear Shane Walker:

The U.S. Environmental Protection Agency has reviewed Fish and Wildlife Service's May 2023 Notice of Intent to prepare a Supplemental Environmental Impact Statement for a Potential Land Exchange Involving Izembek National Wildlife Refuge Lands (EPA Project Number 09-046-DOI). EPA has conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

Fish and Wildlife Service proposes to consider the effects of a potential land exchange of certain lands owned by the King Cove Corporation and/or the State of Alaska with certain lands owned by the U.S. Government. King Cove would use the acquired land for a road corridor for noncommercial use through the Izembek National Wildlife Refuge and the Izembek Wilderness Area. Potential action alternatives under consideration include action alternatives from the 2013 Izembek National Wildlife Refuge Land Exchange/Road Corridor EIS (2013 EIS) and a new alternative for the terms of the proposed land exchange for a road corridor approved in the 2019 Exchange Agreement. A preferred alternative has not been identified at this time.

Executive Order 14096 on *Revitalizing Our Nation's Commitment to Environmental Justice for All* states that EPA, under Section 309 of the Clean Air Act, will assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with environmental justice concerns. Given EPA's area of expertise in environmental justice, EPA encourages FWS to invite EPA to participate as a cooperating agency in developing this SEIS. Lead agencies find EPA's early engagement to be useful because it promotes streamlined federal decisions, ensures the SEIS sufficiently assesses and characterizes impacts, and informs avoidance and mitigation measures.

EPA has concerns about the project activities potential impacts to several resource areas, including environmental justice concerns, water quality, air quality, and climate change impacts. EPA emphasizes the importance of continuing to engage early with agencies and tribal and state governments for feedback beyond project scoping. Enclosed are EPA's scoping comments on specific topics important to consider in this project's NEPA analysis.

Thank you for the opportunity to review the NOI for this project. If you have questions about this review, please contact Emily Bitalac of my staff at (206) 553-2581 and bitalac.emily@epa.gov, or me, at (206) 553-1774 or at chu.rebecca@epa.gov.

Sincerely,

REBECCA CHU

Digitally signed by REBECCA CHU
Date: 2023.06.16 10:56:36 -07'00'

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

U.S. EPA Detailed Comments on the
Potential Land Exchange Involving Izembek National Wildlife Refuge Lands Supplemental NOI
Aleutians East Borough, Alaska
June 2023

Purpose and Need

EPA recommends that the SEIS include a clear and concise statement of the underlying purpose and need for the proposed project, consistent with the implementing regulations for NEPA.[1] In presenting the purpose and need for the proposed action, reflect the broader public interest and need for this project in addition to FWS's purpose in responding to the proposed action. An appropriately defined purpose and need statement is important in developing the analysis of a range of reasonable and practicable alternatives in the SEIS that will meet the requirements of NEPA. Consider the rapidity of climate change in Alaska and environmental justice concerns of communities when assessing the proposed project impacts in defining the purpose and need.

In identifying environmental justice and climate concerns of communities impacted by the proposed project, EPA recommends our EJScreen Mapping Tool as a helpful way to identify where and the type of EJ concerns that may occur in the project area. As further described in this document, EPA's EJScreen Mapping Tool includes mapping layers for critical service gaps such as medically underserved areas or food deserts, in addition to climate change data such as coastal flood hazard, seal level rise, and flood risks.

Alternatives Analysis

EPA recommends the SEIS include a reasonable range of alternatives that meet the stated purpose and need for the project which are responsive to the issues identified during the scoping process. A reasonable range of alternatives includes options for avoiding environmental impacts, while the alternatives analysis describes the approach used to identify environmentally sensitive areas and the process used to designate areas in terms of sensitivity. Describe the rationale used to determine whether impacts of an alternative are significant or not.

Water Quality and Aquatic Resources

Clean Water Act § 402

EPA has delegated authority to issue National Pollutant Discharge Elimination System (NPDES) permits to the Alaska Department of Environmental Conservation and retained authority in several instances.[2] EPA issues NPDES permits for federally-owned facilities located in Denali National Park; facilities operating outside state waters; facilities that have been issued Clean Water Act § 301(h) waivers; and all permits on tribal lands.

EPA recommends the SEIS identify any discharges to WOTUS that are known, or are likely, to occur during construction and operation of the project and how these discharges would be managed and minimized. Identify the NPDES permits that will be obtained for the construction phase, new (or modifications to) existing permits for operations, and how any previous permit exceedances could be prevented by incorporating pollution prevention measures into the project.

[1] 40 C.F.R. §1502.13.
[2] https://dec.alaska.gov/water/wastewater/. Accessed 6/5/2023.

CWA § 404

CWA§ 404 requires permits from the U.S. Army Corps of Engineers for the discharge of dredged or fill material into WOTUS. Wetlands, vegetated shallows, mud flats, and cobble substrates are all considered special aquatic sites under the CWA Section 404(b)(1) Guidelines (40 CFR 230). EPA recommends that the SEIS:

- Clearly identify any discharges to WOTUS that are known, or likely, to occur that will be subject to CWA § 404. Identify and describe the impact of those discharges, control measures to be employed to address those impacts, and best management practices to prevent discharge of water and pollutants.
- Structure the alternatives analysis consistent with requirements of both the CWA and NEPA.
- Describe the regulatory criteria and processes utilized to screen potential alternatives and thoroughly evaluate alternatives that would pose less adverse impacts.
- Describe how compensatory mitigation will be quantified and provided to offset impacts, with specific project examples and options, as available.

For context on the CWA § 404(b)(1) analysis, the Guidelines include four main requirements (40 CFR 230.10 (a) through (d)):

Least Environmentally Damaging Practical Alternative (LEDPA) Determination - Section 230.10(a)

A CWA § 404 permit can be issued for the LEDPA only. Practicable alternatives are those that are capable and feasible of being done after taking into consideration costs, technology, and logistics. Costs alone cannot make a project not practicable. CWA § 404 permit decisions require a comprehensive evaluation of the range of alternatives to ensure the permitted alternative is the LEDPA. Identification of the LEDPA is achieved by performing an alternatives analysis that estimates the direct, indirect, and cumulative impacts to jurisdictional WOTUS that would result from each of the potential project alternatives.

Water Quality - Section 230.10(b)

Prohibits permitting projects that would cause or contribute to violations of water quality standards, violates any applicable toxic effluent standard, jeopardizes continued existence of endangered or threatened species and impacts to critical habitat under the Endangered Species Act, or violates any requirements to protect any marine sanctuary designated under Marine Protection, Research, and Sanctuaries Act.

Significant Degradation - Section 230.10(c)

Prohibits permitting a project that causes or contributes to significant degradation of aquatic resources. Effects contributing to significant degradation include: (1) adverse effects on plankton, fish, shellfish, wildlife, and special aquatic sites (40 CFR 230.10(c)(1)), (2) adverse effects on life stages of aquatic life (40 CFR 230.10(c)(2)), (3) aquatic ecosystem diversity, productivity, and stability including loss of fish and wildlife habitat (40 CFR 230.10(c)(3)), and (4) impairment or destruction of endangered species habitat (40 CFR 230.30(2)).

Mitigation - Section 230.10(d)

Requires compensatory mitigation for unavoidable impacts to aquatic resource functions. The 2008 Joint EPA-Corps Federal Mitigation Rule (40 CFR 230.91-98) establishes a preference for compensatory mitigation based on a watershed approach, which can ensure that potential direct and indirect impacts of the project are offset. In addition to identifying all measures to avoid and

minimize adverse impacts to the aquatic environment (showing compliance with 40 CFR Part 230.10(a)), for unavoidable impacts, identify compensatory mitigation.

CWA§ 401
The CWA provides states and authorized tribes the authority to grant, deny, or waive certification of proposed federal licenses or permits that may discharge into WOTUS. This section of the CWA is an important tool for states and authorized tribes, in collaboration with federal agencies, to help protect the water quality of federally regulated waters within their borders. In developing the SEIS, EPA recommends early coordination with the State of Alaska regarding CWA § 401 for the purposes of streamlining regulatory processes.

CWA § 303(d)
The CWA requires states to develop a list of impaired waters that do not meet water quality standards, establish priority rankings, and develop action plans called Total Maximum Daily Loads (TMDLs) to improve water quality. EPA recommends the SEIS include information on any CWA § 303(d) impaired waters in the project area and any efforts related to TMDLs. Discuss what effect, if any, project discharges may have on impaired waterbodies. EPA recommends the SEIS describe existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters.

Aquatic Habitat
EPA recommends the SEIS describe aquatic habitats in the affected environment (e.g., habitat type, present plant and animal species, functional values, and integrity) and the environmental consequences of the proposed action on these resources. Evaluate impacts to aquatic resources in terms of the impacted acreage and by functions performed. Project construction, operation, and maintenance may affect a variety of aquatic resources. The project has potential to degrade habitat for fish and other aquatic biota, and these resources may experience varying degrees of impacts and alteration of their hydrologic functions. For any impacts that cannot be avoided through siting and design, describe the types, location, and estimated effectiveness of best management practices applied to minimize and mitigate impacts to aquatic resources.

EPA also recommends coordinating with NOAA/NMFS to devise the best possible mitigation plan to alleviate any noise impacts to aquatic species and birds from construction, operation, and maintenance.

As noted on FWS' website[3], the Izembek Lagoon, near the project area, is one of the world's largest eelgrass beds and is important habitat for waterfowl and other migratory birds. EPA recommends considering the significance of aquatic resources of when developing alternatives.

Air Quality
EPA recommends the SEIS discuss air quality impacts from project construction, maintenance, and operations with respect to criteria air pollutants and air toxics, including diesel particulate matter emissions and fugitive dust emissions. Discuss the direct, indirect, and cumulative impacts of project related air emissions. Disclose current representative background air pollutant concentrations in the areas of the project, if representative monitoring datasets are available, and compare these concentrations to the state and federal ambient air quality standards. Provide an evaluation of wind and

[3] https://www.fws.gov/refuge/izembek. Accessed 6-15-23.

precipitation patterns in the vicinity of the project and evaluate how these could influence emissions and air pollutant impacts. Disclose any regulatory air quality requirements related to the project, including any relevant state permitting and pollution control rules.

For air pollutant emissions expected during construction, discuss the potential exposure of these pollutants to nearby sensitive populations. EPA recommends including a discussion of measures to minimize air quality impacts on the local environment and decrease exposure of construction-related emissions to sensitive populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings.

Fugitive Dust

EPA recommends the SEIS evaluate impacts from fugitive dust, including the identification of potential sources, dispersion, and impacts from sources, seasonal variation in emissions, and pathways of exposure. We recommend addressing impacts to both air quality and from deposition of fugitive dust on soils, vegetation, and bodies of water. We recommend that the SEIS include a comprehensive fugitive dust control management plan that outlines the standard operating procedures for monitoring and controlling dust emissions, procedures of response to fugitive dust emission events, and associated record-keeping and reporting. The Plan should include BMPs and other contingencies to address the suppression of fugitive dust emissions, particularly during the identified dry seasons and high wind events. Sources of fugitive dust may include unpaved gravel roads, bulk material stockpiles, and new construction disturbance areas, as well as other areas of the existing and/or expanded facilities where fugitive dust emissions may be generated. If chemical dust suppressants are proposed for fugitive dust control, additional analysis of the impacts of the suppressant material to roadside vegetation and waters would be prudent.

Environmental Justice

Executive Order 14096 on *Revitalizing Our Nation's Commitment to Environmental Justice for All* highlights the need for a whole-of-government effort to confront longstanding environmental injustices and inequities. Consistent with Executive Order 12898, Executive Order 14096 calls on each agency to make achieving EJ part of its mission, including by carrying out environmental reviews under NEPA in a manner that analyzes direct, indirect, and cumulative effects of federal actions on communities with EJ concerns.

EJScreen is EPA's nationally consistent environmental justice screening and mapping tool.[4] EJScreen offers a variety of powerful data and mapping capabilities that enable users to understand details about the population of an area and the environmental conditions in which they live. The tool provides information on environmental and socioeconomic indicators as well as pollution sources, health disparities, critical service gaps, and climate change data. The data is displayed in color-coded maps and standard data reports which feature how a selected location compares to the rest of the nation and state.

Assessing data from EJScreen is a useful first step in identifying locations in the area that may be candidates for further review or targeted outreach. EPA considers a project to be in an area of potential EJ concern when an EJScreen analysis for the impacted area shows one or more of the EJ Indexes at or above the 80th percentile in the nation and/or state. At a minimum, EPA recommends an EJScreen analysis consider EJScreen information for the block group(s) which contains the proposed action(s) and a one-mile radius around those areas.

[4] https://ejscreen.epa.gov/mapper/. Accessed 6/8/2023.

It is important to consider all impacted areas by the proposed action(s). Areas of impact can be very focused and contained within a single block group, or broader, spanning across several block groups and communities.[5] Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators.[6] EPA notes this is especially true in Alaska where not all EJScreen data is available. Therefore, additional review or outreach may be necessary for the proposed action. To address these potential concerns, EPA recommends the SEIS:

- Apply methods from "Environmental Justice Interagency Working Group Promising Practices for EJ Methodologies in NEPA Reviews" report to this project.[7] This report compiles methodologies from current agency practices for integrating EJ considerations in NEPA processes. The Promising Practices Report provides particularly useful guidance in assessing the potential direct and indirect impacts of a project, as well as the potentially increased vulnerabilities certain populations may have due to the cumulative impacts of environmental harm.
- Apply guidance from the Council of Environmental Quality's guidance document "Environmental Justice Guidance Under the National Environmental Policy Act" to this project (CEQ's EJ Guidance).[8]
- Characterize the project site with specific information or data related to EJ concerns.[9]
- Describe potential EJ concerns for all EJ Indexes at or above the 80th percentile in the state and/or nation.
- Screen for and describe all individual block groups within or intersecting a 1-mile radius of the project.
- Describe individual block groups within the project area in addition to an area-wide assessment.
- Because EJScreen does not have data on all factors that may be relevant for identify EJ concerns, supplement data with state and county level reports and local knowledge including data from the Alaska Department of Health,[10] the Alaska Department of Environmental Conservation,[11] and the Alaska Department of Fish and Game.[12]

It is important to consider both the potential short-term impacts of the proposed action(s) (e.g., construction noise, disrupted air quality, and viewscape), along with the potential long-term impacts

[5] Agencies should define community as "either a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions" (Interim Justice40 Guidance – Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad, January 27, 2021).
[6] EPA's Technical Documentation for EJScreen: https://www.epa.gov/ejscreen/technical-information-about-ejscreen. Accessed 6/6/2023.
[7] Promising Practices for EJ Methodologies in NEPA Reviews: https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf. Accessed 6/6/2023.
[8] Environmental Justice Guidance Under the National Environmental Policy Act: https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf. Accessed 6/7/2023.
[9] For more information about potential EJ concerns, refer to the July 21, 2021, Memorandum for the Heads of Departments and Agencies Interim Implementation Guidance for the Justice40 Initiative: https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf. Accessed 6/6/2023.
[10] https://health.alaska.gov/dph/vitalstats/pages/data/default.aspx. Accessed 6/8/2023.
[11] https://data-soa-adec.opendata.arcgis.com/. Accessed 6/8/2023.
[12] https://www.adfg.alaska.gov/index.cfm?adfg=maps.data. Accessed 6/8/2023.

(e.g. noise and air quality disruption due to vehicle traffic, disrupted access to areas of subsistence and traditional use by Indigenous populations) on communities with EJ concerns.

EPA notes the purpose of the 2013 EIS was "to address health and safety issues."[13] In addition to environmental and social indicators, EJ concerns may include critical service gaps such as medically underserved areas and food deserts. EPA notes the project area is highlighted as a medically underserved area in EJScreen based on data from the Health Resources and Services Administration.[14] EPA recommends considering access to medical care under the lens of EJ and analyzing any changes to access from the proposed project.

Subsistence

Given the high nutritional and cultural value of subsistence food within Alaska, EPA recommends analyzing the potential impacts of the proposed project and its reasonably foreseeable actions to the regional subsistence practices and economies. When analyzing the impact of the proposed action on subsistence practice, account for the unique cumulative impacts caused by remote geography (i.e., off the road system), regional food equity, and importance of subsistence way-of-life practices experienced by communities in the proposed project area.

To analyze the impacts of the proposed project on subsistence practices and resources, EPA recommends that the SEIS document: the baseline subsistence food consumption; changes in the quantity, quality, and/or perceived quality of subsistence foods due to the proposed project; and potential impacts in subsistence practices in response to changes in quality of subsistence resources. EPA notes Izembek National Wildlife Refuge provides access for rural residents to practice a subsistence way of life.[15] To address impacts by the proposed project on subsistence practices, EPA recommends the SEIS fully evaluate the proposed project impacts to subsistence practices and resources; meaningfully engage with the impacted communities throughout the NEPA analysis; and, in consultation with the impacted communities, identify mechanisms to avoid and/or mitigate impacts to subsistence communities and subsistence resources.

Traditional Ecological Knowledge

On November 30, 2022, CEQ published Guidance for Federal Department and Agencies on Indigenous Knowledge.[16] EPA recommends the SEIS include the identification, inclusion, and integration of Traditional Ecological Knowledge (TEK) into the NEPA analysis. TEK can include the collection of local and traditional knowledge concerning the affected environment, anticipated impacts from the project, as well as traditional hunting and land use patterns in the area. TEK could also be used to support the understanding of how climate change has impacted local environmental resources and subsistence resources. In addition to reviewing any pertinent traditional environmental knowledge currently available, additional studies and outreach may be conducted as necessary to clearly identify concerns and potential impacts, including cumulative impacts, from the proposed project and project alternatives.

Meaningful Public Engagement

EPA recommends the SEIS detail the opportunities for effective and meaningful public engagement for communities with EJ concerns, as described in the Promising Practices for EJ Methodologies in NEPA

[13] FEIS page 1-5.
[14] https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation#mups. Accessed 6/7/2023.
[15] https://www.fws.gov/refuge/izembek. Accessed 6/7/2023.
[16] https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf. Accessed 6/2/2023.

reviews and Executive Order 14096. We recommend the following measures to further advance meaningful involvement:

- Carefully review and consider community feedback provided during the NEPA process. Ensure that the NEPA engagement approach is sensitive and responsive to the wellbeing of affected communities.
- Ensure that community feedback is reflected in the decision-making process. Design robust community engagement practices to maximize participation opportunities for communities that would be affected by the project, such as community-based workshops to facilitate discussion and issue resolution. Community-based workshops may also provide an opportunity to identify key issues and milestones for meaningful engagement in the NEPA process for the communities.
- Provide early and frequent outreach and engagement opportunities to collect and incorporate community feedback throughout the NEPA process and to maintain maximum transparency.
- Ensure that translation/interpretation services are provided to accommodate linguistically isolated populations.
- Address technology barriers that may prohibit participation from communities affected by the project.
- Ensure that meetings are scheduled at a time and location that is accessible for community participants, including scheduling meetings after work hours and on weekends as appropriate.
- Provide ample notice of meetings and commenting opportunities so that community members have sufficient time to prepare and participate.
- Promote engagement opportunities within appropriate outlets used by affected communities, such as newspapers, radio, and social media.
- Ensure that all project-related information is conveyed using plain language so that community members of varied reading proficiencies can readily understand the project-related information.

Tribal Consultation

EPA encourages FWS to consult with the Tribes and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the SEIS describe the issues raised during the consultations and how those issues were addressed.

Cultural Resources

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on historic properties, including those of traditional religious and cultural importance.[17] The NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate state or tribal Historic Preservation Officer. We recommend that the SEIS discuss potential impacts to historic properties, including any tribal, cultural, or other treaty resources that are historic or traditional cultural properties and identify alternatives and mitigation measures that would minimize these impacts.

Climate Change

On January 9, 2023, CEQ published interim guidance to assist federal agencies in assessing and disclosing climate change impacts during environmental reviews.[18] CEQ developed this guidance in response to Executive Order 13990 on *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This interim guidance is effective immediately. CEQ indicated that

[17] 36 C.F.R. Part 800.

[18] https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate. Accessed 6/7/2023.

agencies use this interim guidance to inform the NEPA review for all new proposed actions and may use it for evaluations in process, as agencies deem appropriate, such as informing the consideration of alternatives or helping address comments raised through the public comment process. EPA recommends the SEIS apply the interim guidance as appropriate, to ensure robust consideration of potential climate impacts, mitigation, and adaptation issues.

Climate Change in Alaska

EPA is concerned about the potential significance and intensity of climate change impacts in the proposed project area considering the rapidity of climate change throughout Alaska and effect on Alaska Native communities as documented in the National Climate Assessment (NCA).[19] Alaska's climate has warmed twice as fast as the rest of the nation, bringing widespread impacts including receding sea ice, melting glaciers, thawing permafrost, rising ocean temperatures, and ocean acidification.

A recent study quantified the economic impacts of climate change on Alaska public infrastructure, which estimated cumulative expenses from climate-related damage to infrastructure to totaled $5.5 billion (2015 to 2099) without adaptation measures.[20] The largest source of damages resulted from road flooding caused by increased precipitation.[21] Smaller damages were observed for airports, railroads, and pipelines.

In light of these concerns, EPA recommends the SEIS analyze the long-term impacts of climate change to the proposed project and potential maintenance requirements to adapt to changing climatic conditions. If projected changes could exacerbate the environmental impacts of the project, the SEIS will need to consider these likely impacts in the NEPA analysis for the project.

EPA also recommends evaluating and incorporating TEK and into adaptation and resilience planning as appropriate. Local climate plans and assessments, including those from indigenous communities and Tribal governments in Alaska[22] may be helpful in evaluating the impacts and identifying mitigation measures.

Ecological Connectivity

On March 21, 2023 CEQ published Guidance to Federal Departments and Agencies on Ecological Connectivity and Wildlife Corridors.[23] This guidance reinforces the need to promote greater connectivity across terrestrial, marine, and freshwater habitats to sustain the tremendous biodiversity that exists in the U.S. and enable wildlife to adapt to fluctuating environmental conditions, including those caused by climate change. Federal agencies are expected to advance the objectives of this guidance by developing policies, through regulations, guidance, or other means, to consider how to

[19] "Fourth National Climate Assessment: Chapter 26: Alaska." NCA4, U.S. Global Change Research Program, 2018, https://nca2018.globalchange.gov/chapter/26/. Accessed 6/7/2023.
[20] A.M. Melvina et. al. (December 27, 2016). Climate change damages to Alaska public infrastructure and the economics of proactive adaptation. *Proceedings of the National Academy of Sciences*, 114, no. 2 (2017): E122-E131. Accessible at: https://www.pnas.org/doi/full/10.1073/pnas.1611056113. Accessed 6/7/2023.
[21] University of Alaska Fairbanks. "Alaska infrastructure at risk of earlier failure." ScienceDaily. ScienceDaily, 24 June 2021. Accessible at: www.sciencedaily.com/releases/2021/06/210624161653.htm. Accessed 6/7/2023.
[22] A. Steffen, S. A. Greenlaw, M. Biermann, and A. L. Lovecraft (2021). Alaska's Climate Change Policy Development. Fairbanks: Center for Arctic Policy Studies. Accessible at: https://uaf.edu/caps/our-work/CAPS-alaskas-climate-policy-development-March2021-corrected.pdf. Accessed 6/7/2023.
[23] https://www.whitehouse.gov/wp-content/uploads/2023/03/230318-Corridors-connectivity-guidance-memo-final-draft-formatted.pdf. Accessed 6/6/2023.

conserve, enhance, protect, and restore corridors and connectivity during planning and decision-making, and to encourage collaborative processes across management and ownership boundaries.

Biological Resources, Habitat, and Wildlife
EPA recommends the SEIS identify and quantify which special status species and/or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts to these species. Please discuss the SEIS's consistency with existing laws and regulations, including the Migratory Bird Treaty Act. We also recommend the SEIS include mitigation measures to minimize impacts to special status species, describe the effectiveness of such measures to protect wildlife and habitat, and indicate how they would be implemented and enforced**.**

Endangered Species Act
The proposed project may impact endangered, threatened, or candidate species listed under the Endangered Species Act and their habitats. State sensitive species may also be impacted. EPA recommends that the SEIS:

- Describe how the proposed project will meet all requirements under ESA.
- Identify the endangered, threatened, and candidate species under ESA, and other sensitive species within the project area and vicinity.
- Provide information on the critical habitat for the species.
- Evaluate impacts the project could have on the species and their critical habitats.

Cumulative Effects
EPA recommends the SEIS include an assessment of the cumulative impacts that would be associated with the proposed action, specifically, five key areas:

- Resources, if any, that are being cumulatively impacted.
- Appropriate geographic area and the time over which the effects have occurred and will occur.
- All past, present, and reasonably foreseeable future actions that have affected, are affecting, or would affect resources of concern.
- A benchmark or baseline of existing environmental conditions.
- Scientifically defensible threshold levels.

Monitoring and Adaptive Management
As the proposed project has the potential to impact many environmental resources for an extended period, EPA recommends that the project be designed to include a monitoring program to ensure compliance with and efficacy of mitigation measures. EPA recommends the SEIS describe the monitoring program and how it will be used as an effective feedback mechanism so that the project can be adaptively managed over time, and any needed adjustments can be made to the project to meet environmental objectives throughout its lifespan.